Through improved and more scientific operation and maintenance practices, unplanned down time is kept to a minimum.

562. [*Transferred to the 26th July*, 1989]

Process for extraction of kerosene and diesel from natural gas

563. SHRI MAHENDRA PRASAD: Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether the National Chemical Laboratory, Pune has been successful in developing a process for extraction of kerosene and diesel from natural gas; and

(b) whether any scheme for extraction of kerosene and diesel has since been worked out, if so, what are the details thereof ?

THE MINISTER OF STATE OF THE MINISTRY OF PETROLEUM AND NATURAL GAS (SHRI BRAHM DUTT): (a) and (b) The conversion of natural gas to kerosene and diesel invoves the following stages:

(i) Natural gas to Methanol

(ii) Methanol to Olefins

(iii) Olefins to middle distillates, *viz.*, kerosene and diesel.

The National Chemical Laboratory, Pune has developed catalysts for converting Methanol to Olefins and Olefins to Kerosene and diesel. Conversion of natural gas to methanol is a well established process.

In order to prove the catalysts developed by the NCL on commercial grounds, it has been proposed to set up a pilot plant a BPCL Refinery, Bombay jointly by the National Chemical Laboratory, BPCL and Davy Power Gas India Pvt. Ltd. The cost of the pilot plant is estimated to be Rs. 6 crores and the capacity would be one tonne per day of kerosene and diesel.

Hike in coal prices

564. SHRIMATI KANAK MUKHERJEE: Will the Minister of ENERGY be pleased to state:

(a) what is the average price of coal (per tonne) since nationalisation of coal Industry year-wise, upto the 1st January, 1989;

(b) on how many occasions since nationalisation there have been hike in coal prices (average per tonne) and the extent thereof on each occasion (in rupee as well as in per cent);

(c) what are the reasons for this frequent price hike; and

(d) the total revenue realised through price hike year-wise from 1980 to 1989?

THE MINISTER OF STATE IN THE DEPARTMENT OF COAL IN THE MINISTRY OF ENERGY (SHRI C. K. JAFFAR SHARIEF): (a) and (b) Revisions made in the average pit-head price of coal for Coal India Ltd. since nationalisation of Coal Industry are indicated in the statement annexed. (*See* below)

(c) The increase in the price of coal has been necessitated because of increase in the cost of production due to escalation in the cost of inputs *viz.* wages, VDA, stores, power, capital cost etc.